



Appendix 1

Potential Economic and Fiscal Impacts for the State of Washington from South Lake Union Development

Purpose

The economic development activity in South Lake Union will generate revenues for many public jurisdictions including the State of Washington. The draft Potential Economic and Fiscal Impacts of South Lake Union Development report identifies the revenue streams to the City of Seattle and to all governmental agencies in Washington State as a total. During the peer review process, the City was asked to compile revenue estimates specifically for the State of Washington. This appendix addresses that question by identifying the specific revenues which will accrue to the State of Washington from the potential development activity in South Lake Union.

Methodology

Phase I and II Development

Revenues flow from current and future development, projections for which are based on a study of redevelopable property in the neighborhood by Heartland. This development is divided into two phases. The first phase of development is in the planning stages and major tenants are lined up for many of these projects. The employment and revenue impacts associated with this phase of development are reasonably predictable. Given that, this report first estimates the potential revenue from development now under construction or planned between now and 2007 (**Phase I**).

Two alternative cases are considered for **Phase II**, defined as the development which is projected to occur between 2008 and 2020. The first case assumes that **full-buildout** of the Heartland scenario will occur by 2020. This assumes that approximately 64 percent of the redevelopable land in the neighborhood will in fact be redeveloped by 2020. Given uncertainty about the pace of overall development in the region, a second case is considered in this report in which only 50 percent of the estimated Phase II growth is in fact developed by 2020. This projection is defined as the **partial build-out** scenario. These two scenarios provide a low and high estimate for potential development in South Lake Union.

This report then calculates the revenue expected from the total potential development of Phase I and Phase II combined, followed by a five-year period (2020 to 2025) of full occupancy, but no further growth. The Phase II development is assumed to occur evenly between 2008 and 2020. The employment and revenue impacts are calculated for the partial build-out and full build-out scenarios described above.

Direct and Indirect Impacts

This study includes both **direct impacts**: impacts generated by the likely increases in employment as the current and projected development in the area comes into service; and **indirect impacts**: the multiplier impact of the direct impacts resulting from the purchases of goods and services by the business occupants of the new buildings, as well as the

purchases of goods and services by the workforce employed in the businesses occupying these new buildings. An input–output model of the state and local economy is used to estimate the indirect impacts.¹ Adding up direct and indirect impacts yields estimates of **total impacts**.

Assumptions

The following are the summary tables from Potential Economic and Fiscal Impacts of South Lake Union Development regarding the growth and employment projections for South Lake Union economic activity.

Commercial and Residential Development

Estimated Net New Additions to Developed Space in South Lake Union Neighborhood by Phase
(million square feet – net new)

Industry/Use	Phase I (2000- 2007)	Full Build-out of Phase II		Partial Build-out of Phase II	
		Phase II (2008- 2020)	Total (2000- 2020)	Phase II (2008- 2020)	Total (2000- 2020)
Biotech	1.382	1.138	2.520	0.569	1.951
Office	0.708	3.252	3.960	1.050	1.758
Retail & hotel	0.120	0.600	0.720	0.876	0.996
Commercial Sub-Total	2.210	4.990	7.200	2.495	4.705
Residential	0.833	6.830	7.663	4.215	5.048
Total square feet	3.043	11.820	14.863	6.710	9.753

Other key assumptions were derived from development companies and prior studies of the South Lake Union area. These assumptions include:

- Average assessment value of biotechnology research space--\$251 per square foot
- Average assessment value of commercial space--\$201 per square foot
- Average assessment value of residential space--\$100 per square foot
- Residential units will average--750 square feet
- Land costs represent 15% of total development costs. This 15% is not subject to the sales tax on construction.

¹ Chase, Robert A. , Philip Bourque, and Richard S. Conway. *The 1987 Washington State Input-Output Study*. Report for Washington State Office of Financial Management, by Graduate School of Business, University of Washington, Seattle, September 1993. Prof. William Beyers of the University of Washington Department of Geography has estimated a version of this model that projects impacts within King County. This unpublished version, made available to the author by Prof. Beyers, has been used in other recent impact studies (maritime and music cluster studies for the Seattle Office of Economic Development).

- Phase II development will be completed in even annual increments and will enter service (and enter the tax base) from 2008 to 2020.
- Future inflation rates are unknown and the analysis is conducted in 2005 dollars, with a real discount rate of 3% used to discount future benefits; this discount rate reflects the long term growth potential of the economy².
- Tax rates and utility fees will not change and therefore current yields per square foot or per employee in comparable space can be used to estimate the City's future tax and fee revenues.³
- For a mix of biotech, commercial office, and retail, an average of 3.29 employees will occupy each 1,000 square feet of space as assumed by Heartland in their 2002 study of the South Lake Union area.
- With 35% of the 7.2 million square feet of development assumed to be biotech research and development space, the remainder will be 55% office and 10% retail; these assumptions generally reflect the pattern established in Phase I and are consistent with the Puget Sound Regional Council's long range projections for the area and surrounding neighborhoods.

Any of these assumptions could be easily modified by analysts who wish to consider alternative scenarios for future development of the South Lake Union region. The value of this study is in setting up an analytic framework that can be used in sensitivity studies to explore the implications of alternative assumptions, or to assess the impact of changing development patterns as market conditions unfold over the next 17 years.

² City financial policies call for the use of a discount rate that approximates the inflation-adjusted marginal pre-tax rate of return on an average investment in the private sector. The local economy has historically grown faster than the nation in recent decades, and it may tend to do so once the current recessionary period ends. Also, the long term growth rate of the national economy may have increased from a historical trend rate as a consequence of new technology and higher productivity growth rates as seen in the late 1990s.

³ Data from City of Seattle Finance Dept.

Direct Employment

Direct employment figures are generated by multiplying the projected square foot development from the previous table by an average of 3.29 employees occupying each 1,000 square feet. The construction jobs are listed separately in the tables below since they end when the construction process ends in 2020 under both scenarios.

Direct Job Creation Estimates for New South Lake Union Buildings: Full Build-out Scenario

Industry	Phase I 2000-07	Phase II 2008-20	Total 2020
Biotech	3,159	3,141	6,300
Office (Business Services, Financial, Real Estate)	2,518	12,213	14,731
Retail	732	6,232	6,964
Permanent direct job total	6,409	21,586	27,995
Construction	628	753	

Direct Job Creation Estimates for New South Lake Union Buildings: Partial Build-out Scenario

Industry	Phase I 2000-07	Phase II 2008-20	Total 2020
Biotech	3,159	958	4,117
Office (Business Services, Financial, Real Estate)	2,518	7,108	9,626
Retail	732	1,018	1,750
Permanent direct job total	6,409	9,084	15,493
Construction	628	376	

Total Employment

Indirect employment figures are generated by the input-output model, which estimates the impacts of payrolls and purchases of the businesses implied by the direct job creation tables. These payrolls and purchases stimulate additional business activity in the area. The construction jobs are listed separately, as in the tables above. However, the indirect impact of the construction activity is included in the indirect job estimates below.

Total Job Creation Estimates for New South Lake Union Buildings: Full Build-out Scenario

Industry	Phase I 2000-07	Phase II 2008-20	Total 2020
All Direct Jobs	6,409	21,586	29,377
All Indirect Jobs	9,862	38,161	48,029
Total Permanent Jobs	16,271	59,747	76,018
Construction	628	753	

**Total Job Creation Estimates for New South Lake Union Buildings:
Partial Build-out Scenario**

Industry	Phase I 2000-07	Phase II 2008-20	Total 2020
All Direct Jobs	6,409	9,084	15,493
All Indirect Jobs	<u>9,862</u>	<u>22,383</u>	<u>32,245</u>
Total Permanent Jobs	16,271	31,467	47,738
Construction	628	376	

Fiscal Impacts

Fiscal impacts derive both from construction activity and the subsequent use of new buildings by various kinds of businesses and non-profit organizations. Fiscal impacts are estimated using current tax rates. Estimates are run out to the year 2025. The development occurring in South Lake Union will generate revenues to the State of Washington through property, business and occupation, sales, and utility taxes. (These revenue streams are fully explained in the main body of the report).

The following are summary tables which estimate the total revenue projections to the State of Washington due to development in South Lake Union, showing both the full build-out and the partial build-out scenarios

Total Tax Revenue to State of Washington
(net present value, 2005-2025 in millions of dollars)

Tax	Full Build-out	Partial Build-out
Property	\$102.47	\$88.45
B&O	\$320.18	\$206.09
Sales Tax--Retail	\$192.59	\$125.33
Sales Tax--Construction	\$218.82	\$96.06
Utility	\$36.29	\$24.65
Total	\$870.36	\$540.58

Summary

The development activity occurring and projected for South Lake Union from now until 2025 will create jobs and add tax revenues to State of Washington's general fund. This analysis presents both a full build-out and a partial build-out scenario, based on the projections of growth in South Lake Union.

This economic activity will create an estimated 15,493 to 29,377 direct jobs in the South Lake Union neighborhood between now and 2020. Furthermore, these direct jobs will generate additional economic activity which will create another 32,245 to 48,029 indirect jobs in the State. The total employment impact of the development in South Lake Union is projected to be between 47,738 and 76,018 new jobs.

The projected tax revenues to the State are estimated to be between \$540 million and \$870 million in net present value for the 2005-2025 time period.